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ured to permit insertion into and removal of a wire member relative to the closure wire lumen 358 via the side opening slot 366.

The side opening slot 366 may be configured in some arrangements to provide a “snap-fit” connection between the closure device 352 and the wire member. In some arrangements, the minimum width of the opening into the side opening slot 366 is less than a maximum width dimension of the wire member. As a result, the portions of the closure device 352 that define the side opening slot 366 expand outward in order for the wire member to pass through the side opening slot 366 into the closure wire lumen 358, and expand to permit removal of the wire member from the closure wire lumen 358 out through the side opening slot 366.

Referring to FIG. 14, another example dilator 350 may include a dilator wire lumen 354 and a side opening slot 357. The side opening slot 357 may have features and functionality similar to the side opening slot 366 of the closure device 352 described above with reference to FIG. 12.

FIG. 13 illustrates another example closure device 452 that includes a closure wire lumen 458, a sealing pad lumen 460, a sealing pad lumen 462, and a side opening slot 466. Side opening slot 466 may have similar features and functionality as described above related to the side opening slot 366. The sealing pad lumen 460 may have a shape and size that maximizes a size of the sealing pad 462 that is carried in the closure device 452. The sealing pad lumen 460 is shown having a generally crescent shape cross-section that wraps at least in part around the closure wire lumen 458. The sealing pad 462 may have a similar crescent shape cross-section that mirrors the cross-sectional shape of the sealing pad lumen 460. The sealing pad 462 may have a greater cross-sectional area as compared to a cross-sectional area of a sealing pad having a circular cross-sectional shape for a closure device with a similar outer profile (i.e., compared to the closure device 352 of FIG. 12). Maximizing a size of a sealing pad of the closure device may be helpful in sealing the tissue tract.

The dilator and closure device features illustrated in FIGS. 12-14 may be used in combination with each other or in combination with any of the other dilator and closure device configurations disclosed in FIGS. 4-11. In some examples, the dilator is mounted to the second wire member 14 and the closure device is mounted to the first wire member 12. In other examples, the anchor member and anchor actuator features may be included with either or both of the first and second wire members.

Another example wire assembly includes first and second wire members that are integrally formed as a single piece. The wire assembly may include a single wire at a distal end that splits into first and second wire members to form a Y-shaped joint. The wire member may include, for example, a braided material that can be split into first and second portions while maintaining an integral structure.

The preceding description has been presented only to illustrate and describe exemplary embodiments of the present disclosure. It is not intended to be exhaustive or to limit the invention to any precise form disclosed. Many modifications and variations are possible in light of the above teaching. It is intended that the scope of the invention be defined by the following claims.

What is claimed is:

1. A tissue puncture closure assembly, comprising:
a wire assembly including:

a first wire member having a distal end portion comprising a first length and a proximal end portion, the first wire member having a circular cross-sectional shape;

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a second wire member having a distal end portion comprising a second length and a proximal end portion, the second wire member having a crescent cross-sectional shape that follows an outer contour of the circular cross-sectional shape of the first wire member;

wherein the first length and the second length are arranged side-by-side with each other and are fixedly connected to each other at a plurality of connection points along the first and second lengths, and the proximal end portion of the first wire member is arranged side-by-side with the proximal end portion of the second wire member wherein the proximal end portions are disconnected from each other;

a first device having a distal end portion, the first device being configured to advance over the first wire member, the distal end portion of the first wire member configured to advance through a lumen in the first device past the distal end portion of the first device;

a sealing pad deployable from a pad lumen in the first device, the sealing pad having a cross-sectional shape mirroring a cross-section of the pad lumen in the first device upon deployment from the pad lumen;

a second device configured to advance over the second wire member.

2. The tissue puncture locator device of claim 1 wherein the first device is a tissue closure device and the second device is a dilator.

3. The tissue puncture locator device of claim 1, wherein the first wire member has a first cross-sectional shape and the second wire member has a second cross-sectional shape that is different from the first cross-sectional shape.

4. The tissue puncture locator device of claim 1, wherein one of the first and second wire members includes an expandable anchor positioned at the distal end portion thereof, and an actuator member that extends from the anchor to the proximal end portion of thereof, the actuator member being operable to move the anchor between expanded and unexpanded states.

5. The tissue puncture locator device of claim 1, wherein the first device is operable to position the sealing pad within a percutaneous incision.

6. The tissue puncture locator device of claim 1, wherein the first device includes a first wire lumen, the pad lumen being radially spaced apart from the first wire lumen, and the second device includes a second wire lumen, the first and second wire lumens being configured to house the first and second wire members, respectively.

7. The tissue puncture closure assembly of claim 1, wherein the plurality of connection points comprise a side-by-side connection point extending along the first and second lengths.

8. The tissue puncture closure assembly of claim 1, wherein the plurality of connection points are spaced apart along the first and second lengths.

9. A tissue puncture closure assembly adapted for insertion into and sealing of a tissue puncture in an internal tissue wall that is accessible through a percutaneous incision, the device comprising:

a guidewire having a distal end and a proximal end, the distal end extending through the tissue puncture and percutaneous incision, the proximal end being spaced proximal of the percutaneous incision, the guidewire having first and second guidewire portions arranged side-by-side, the first guidewire portion having a circular cross-sectional shape, the second guidewire portion having a crescent cross-sectional shape, the first and second guidewire portions being fixedly connected to